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CASE REPORT

INTRACTABLE HICCUPS (SINGULTUS) IN CASE OF ANXIETY NEUROSIS

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ABSTRACT

Intractable hiccups (singultus) are continuous involuntary spasmodic contraction of diaphragm resulting in inspiration followed by closure of glottis. However, it is naturally occurring common phenomenon but intractable hiccups are a continuous form of hiccups which persist for more than 2 months. This can be tough task for physician to found out the organic cause of hiccups. We report a case of 40-year-old female who had hiccups since more than 2 months and she is known case of anxiety neurosis, for which ongoing treatment with anti-depressants and anti-anxiety is going on. Evaluating a psychogenic origin hiccup is the main consequence here.

KEYWORDS: Intractable, Hiccups, Spasmodic, Anxiety neurosis

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INTRODUCTION

Hiccups also known as singultus, is an involuntary contraction of diaphragm. This causes an acute gasp inspiration of the air.[1] This is the most common naturally occurring phenomenon but it can be on the serious side also. Evidence also suggests that the main cause of it is through psychogenic or interpersonal factors.[2] Intractable hiccups occurs through factors such as disorders affecting central nervous system and peripheral nerve, psychogenic factors, drug induced and idiopathic causes.[2] Classification of hiccups is according to the duration i.e., Acute hiccups last for less than 48 hours, chronic hiccups last over 48 hours and persistent or intractable hiccups last for more than 1 or 2 months. Due to which they result in depression, anxiety and death if left untreated.[1] The psychogenic factors causing intractable hiccups are stress, excitement, conversion reaction, hysterical neurosis, and malingering. [2] Drug related hiccups are mostly caused by drugs such as benzodiazepines which have a dose-dependent effect. Chemotherapeutic agents and glucocorticoids are also known for causing hiccups. The precipitating cause for the hiccups excitement, stress and depression. [3,5] Hiccups occurring for short period of in healthy patients occurs due to large meal, alcoholic beverages or sudden excitement. It is more common in men i.e., 82% and psychogenic hiccups are more common in women.[3] Frequency of hiccups occurs between 2 and 60/min. The pathophysiology is understood by stimulation of vagus, phrenic or thoracic sympathetic afferent fibers (T6-T12).[4] In the pathophysiology of hiccups, the exact mechanism is not known but dopamine and serotonin play a significant role.[5] For the diagnosis of intractable hiccups, firstly the organic pathology should be identified. The main causes for intractable hiccups are gastro esophageal reflux disease, hypo-natremia, hiatus hernia, abdominal abscesses, abdominal tumors, ischemic/ hemorrhagic cerebrovascular insult etc. [6] Anxiety neurosis is of psychogenic origin caused by a cluster of symptoms such as irritability, faintness, dizziness, swallowing difficulty and palpitation. Hiccups result due to afferent and efferent nerves of respiratory muscle and medullary center which controls the muscles and makes irritated leading to discomfort and depression. Complications related to it are depression, phobias and obsession.[7] The intractable hiccups are clinically evaluated by upper endoscopy, electrocardiogram, magnetic resonance image of brain, symptoms of trigger, electrolytes and full physical evaluation. Most preferred pharmacological treatment is metoclopramide and chlorpromazine which are used as first-line agents.[6] On Metoclopramide, randomized control trial was conducted by wang was found to be promising candidate for intractable hiccups.[8] Baclofen is Gamma-amino butyric acid analog which contains phenyl amine moiety, it is proved that it activates inhibitory neurotransmitter which leads to block of hiccup stimulus.[9] The other drugs to treat intractable hiccups include dopamine agonist, benzodiazepines, tricyclic antidepressants, anticholinergic and H2 receptor antagonist.[10] The only clinical trial by Ramirez. F and Graham. D showed a significant improvement in the trials of the patient by using baclofen. The effectiveness of metoclopramide and chlorpromazine against baclofen is still not evaluated.[11] non-pharmacological treatment associated with hiccups are cold water, breath hold and inserting nasogastric tube.[12] The methods used for interventional are phrenic nerve block. Midazolam can also be used in the terminal illness.[10] This evaluation of the disorder and treatment provides an insight of the review of the condition.

CASE REPORT

A 40-year-old female came to multispecialty hospital is admitted to female medicine ward with the complaints of cough and hiccups since more than 2 months with 3-4 episodes per day. Cough was dry and no other sign and symptoms were observed. She is a known case of anxiety

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neurosis with ongoing Anti-anxiety and anti-depressants. On patient examination, temperature, pulse, blood pressure, consciousness was found to be normal. Patient was relatively asymptomatic before 2 months, then suddenly started having continuous hiccups with only mild cough. There is no facial neurological deficit and burning micturition. In her personal history, her diet is vegetarian, has good appetite and sleep pattern. Her past history does not include any diseases, and has no allergy and family history. On diagnosis of the root cause of the hiccups patient was admitted and provided with IVF NS (100) 0.9% with opt neuron IV 12 hourly, INJ. Pantoprazole IV 12 hourly and tablet. Perinorm thrice a day. Metoclopramide is dopamine antagonist has a therapeutic effectiveness of cessation of hiccups via CNS depression. It is given orally and shows effect in 30 minutes. Patient was also advised to carry out Upper gastrointestinal tract endoscopy, Magnetic resonance imagining and Thyroid stimulating hormone test. All the necessary laboratory data was found to be normal. On asking the patients relative they spoke that the patient had frequent panic attacks. She was advised to take psychological consultation for the condition. All the related evaluating factors and lifestyle changes were made understood.

DISCUSSION

Intractable hiccups in case of anxiety neurosis is a psychogenic origin condition where to rule out the organic cause is a difficult task. As per this case, it was recognized from the ongoing condition called anxiety neurosis. The first-line treatment used for the hiccups is metoclopramide and chlorpamazine. As per the treatment, the patient was provided with metoclopramide (generic perinorm). The patient was treated with it for more than 3 days and decrease in the hiccups was observed. The patient was suggested to use metoclopramide for 15 days thrice a day. And follow up after 15 days was advised. The most important part related to this condition is patient counseling. Patient was advised to do psychological and pharmacotherapy combination. Cognitive behavioral therapy is the most recommended for anxiety disorders. Lifestyle modifications with sudden changes of mood elevating foods, knowing triggers and routine exercise were recommended. Calming and relaxing sessions of meditation or any activity for self is recommended. Her relatives were advised to maintain a proper gesture and environment that patient feels comfortable.

CONCLUSION

This case is an illustrative example of psychogenic origin caused hiccups which lead to the evaluation of the treatment. The patient was continued with anxiolytics and antidepressants for anxiety neurosis and for hiccups symptomatic treatment is given. This explains the diagnostic parameter was a challenge to identify this type of cause. All the laboratory parameters are normal and decrease in the intensity of hiccups was seen. The conditions such as anxiety and panic attacks are the main triggers for the intractable hiccups.

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